

What is claimed is:

1. A method for monitoring services of an information technology (IT) environment, said method comprising evaluating, by a status engine, the status of a service (superordinate service) that depends on at least one of the statuses of one or more other services (subordinate services) and one or more messages coming from services of the IT environment and affecting the status of the superordinate service, according to one or more rules, the rules include at least one of:

- a) a rule that is based on additional attributes of the service other than the status;
- b) a rule that ignores subordinate services;
- c) a rule that is defined by a user on the basis of at least one of i) logical and ii) arithmetical operations of the status of subordinate services or of said messages or of said attributes; and
- d) a rule that is programmed individually by a user.

2. The method of claim 1, wherein the rules, when the status of the superordinate service is calculated, comprise status propagation rules that have as input only one parameter, namely the status of one subordinate service, and status calculation rules that have as input one or more parameters, chosen from the group of: the status of subordinate services, messages, and attributes.

3. The method of claim 1, wherein the evaluation of the status of the superordinate service depends on all three different types of input data: the status of subordinate services, the messages affecting the superordinate service and the additional attributes of the services.

4. The method of claim 1, wherein the additional attributes can take values that are different from the possible values of the status of the services.

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2           5.     The method of claim 1, wherein the status of the superordinate service  
3 is only calculated if certain attributes of the superordinate service are set.  
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5           6.     The method of claim 1, wherein specific subordinate services are  
6 individually treated for the evaluation of the superordinate service.  
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8           7.     The method of claim 1, wherein user-specific external data is included in  
9 the rules.  
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11           8.     The method of claim 1, wherein time of the day information is included in  
12 the rules.  
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14           9.     A computer system for monitoring services of an information technology  
15 (IT) environment, comprising:

16                 a status engine for evaluating the status of the services, said status engine is  
17 programmed so as to calculate the status of a service (superordinate service) that  
18 depends on at least one of the statuses of one or more other services (subordinate  
19 services) and one or more messages coming from services of the IT environment and  
20 affecting the status of the superordinate service, according to one or more rules, the  
21 rules include at least one of:

22                 a) a rule that is based on additional attributes of the service other than the  
23 status;

24                 b) a rule that ignores subordinate services;

25                 c) a rule that is defined by a user on the basis of at least one of i) logical and ii)  
26 arithmetical operations of the status of subordinate services or of said messages or  
27 of said attributes; and

28                 d) a rule that is programmed individually by a user;

1 a user interface for configuring the rules; and  
2 a graphical display for visualizing the monitoring results.  
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4 10. The computer system of claim 9, wherein the interface for configuring  
5 the rules is a graphical user interface.  
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7 11. The computer system of claim 9, wherein the interface for configuring  
8 the rules is an application programming interface to other programming languages.  
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10 12. The computer system of claim 9, wherein the interface for configuring  
11 the rules is a script programming language of which the syntax is provided by the  
12 status engine.  
13

14 13. The computer system of claim 9, wherein the status engine is capable of  
15 handling a graph structure of the IT network of services in which each service can  
16 have one or more depending services and one or more services on which it depends.  
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18 14. The computer system of claim 9, wherein the dependencies between  
19 the services of the IT environment are visualized as a graphical representation.  
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21 15. The computer system of claim 14, wherein the status and status  
22 changes of the services of the IT environment are visualized in a graphical  
23 representation.  
24

25 16. A computer program product including program code, when executed  
26 on a computer system, for carrying out a method for monitoring services within an  
27 information technology (IT) environment, said method comprising evaluating, by a  
28 status engine, the status of a service (superordinate service) that depends on at least  
29 one of the statuses of one or more other services (subordinate services) and one or

1 more messages coming from services of the IT environment and affecting the status  
2 of the superordinate service, according to one or more rules, the rules include at least  
3 one of:

4 a) a rule that is based on additional attributes of the service other than the  
5 status;

6 b) a rule that ignores subordinate services;

7 c) a rule that is defined by a user on the basis of at least one of i) logical and ii)  
8 arithmetical operations of the status of subordinate services or of said messages or  
9 of said attributes; and

10 d) a rule that is programmed individually by a user.

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12 17. The computer program product of claim 16, wherein the program code  
13 provides an interface to the user for configuring the rules.

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15 18. The computer program product of claim 16, wherein the interface for  
16 configuring the rules is a graphical user interface.

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18 19. The computer program product of claim 16, wherein the interface for  
19 configuring the rules is an application programming interface to other programming  
20 languages.

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22 20. The computer program product of claim 16, wherein the interface for  
23 configuring the rules is a script programming language of which the syntax is provided  
24 by the status engine.

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